

METHOD 1 - SAMPLE AND VELOCITY TRAVERSES FOR STATIONARY SOURCES

Applicability and Principle

The correct selection of sampling ports and traverse points from which sampling for air pollutants will be performed will be selected pursuant to EPA Method 1. This method and BTS template are applicable only to stacks ≥ 12 inches internal diameter.

Stack Dimensions and Stack Gas Parameters

Internal Stack Diameter* = _____ in.

For rectangular ducts, the equivalent diameter listed above, calculated by Eqn. 1-1 of the method.

The stack dimensions are _____ in. x _____ in.

Stack Temp. (F) _____ **ACFM** _____ **SCFM** _____

Moisture (%) _____ **DSCFM** _____

Stack Diameters from the nearest flow disturbance (the minimum distances allowed to the nearest disturbance are two diameters downstream and one-half diameter upstream) are:

Downstream _____ **Upstream** _____

Note: If the minimum distances cannot be met, either a new sample location must be selected or the alternative measurement procedure in Section 11.5 of the method will be used. Specify equipment and procedures below:

Stack Diagram Detailing Sample Port Locations and Downstream/Upstream Distances:

The number of traverse/sample points will be selected as follows (*choose one*):

- _____ Figure 1-1 of the method for isokinetic sampling.
- _____ Figure 1-2 of the method for non-isokinetic sampling.

The number of traverse points will be _____.

The location of the traverse/sample points will be selected as follows (*choose one*):

- _____ Table 1-2 of the method for round stacks.
- _____ Table 1-1 of the method for rectangular stacks. The matrix layout will be
_____ x _____.

Sample ports will be located on a plane perpendicular to the direction of flow. For round stacks, two ports will be placed at 90 degrees to each other. For rectangular stacks, the number and location of the ports will be dictated by the chosen sample matrix (Table 1-1) and the division of the stack cross section into equal areas.

The traverse points will be located as follows. Any “adjusted” traverse points pursuant to Section 11.3.2 or 11.3.3 of the method will be noted:

Verification of the **absence of cyclonic flow** will be performed as per Section 11.4 of the method prior to the start of sampling. Documentation will be supplied to the on-site BTS observer and included in the final report.

Proposed deviations from the Method or this BTS template

(Insert any proposed deviations here)